ALERT!

Protect our Forests and Trees.

Help Stop the Movement of Exotic Pests.

DO NOT MOVE FIREWOOD!

Exotic pests like the emerald ash borer can be spread when infested firewood is transported to new areas.

- Do not bring firewood from home.
- Use local sources of firewood.
- If you have brought firewood from home, DON'T take it with you, DON'T leave it– BURN IT!

REPORT!

If you think you have found emerald ash borer, contact one of these offices in your area:

State Department of Agriculture
State Forestry or

Natural Resource Agency

Cooperative Extension Office
USDA Animal and

Plant Health Inspection Service
U.S. Forest Serviceor

Call Toll free:

1-866-322-4512

For more information about emerald ash borer please visit:

www.emeraldashborer.info

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USDA United States Department of Agriculture

What is the Emerald Ash Borer?

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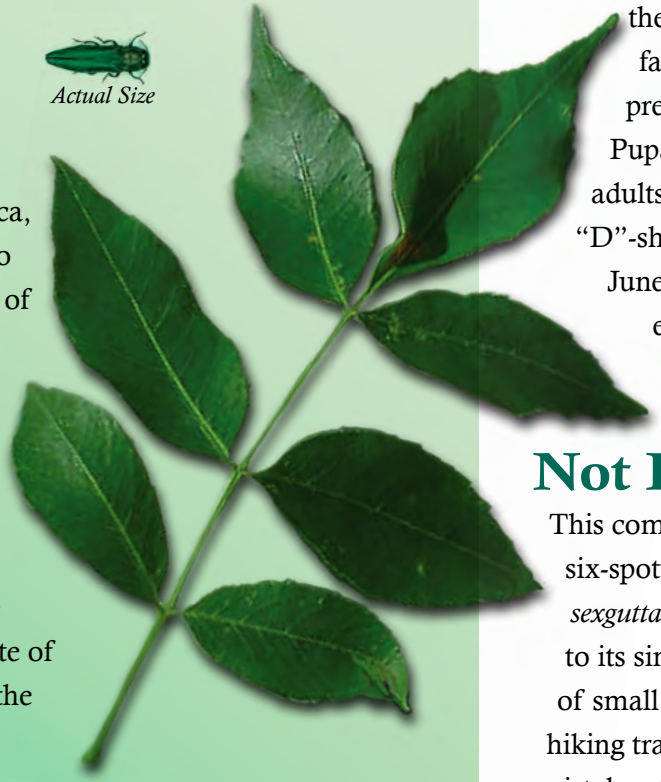
The emerald ash borer,

Agrilus planipennis Fairmaire, a beetle native to Asia, was first detected in Michigan in 2002. Evidence suggests that the beetle was established in Michigan for years prior to its discovery. Emerald ash borer (EAB) has since been detected in many states, and also in Ontario and Quebec, Canada. In addition to spreading by natural means, EAB can be transported to new areas in infested firewood, timber, and nursery stock. This beetle has been responsible for the loss of millions of ash trees in North America.

Actual Size

Host:

In North America, EAB is known to infest all species of ash (*Fraxinus* spp.). Ash can be recognized by the presence of compound leaves which are arranged opposite of one another on the branches.



Photographs: James W. Smith, David Cappaert, www.invasive.org and PA DCNR.

Larva

S-Shaped Galleries

D-Shaped Emergence Hole

Biology:

Eggs are laid between layers of bark and in bark crevices. Larvae hatch in about one week and bore into the tree where they feed on the inner bark and phloem, creating "S"-shaped galleries.

Larvae go through four feeding stages, and then excavate a pupal chamber in the fall, where they will overwinter as prepupae.

Pupation occurs in late spring, and adults begin to emerge through "D"-shaped exit holes in May and early June. Adults will remain active until the end of summer.

Not EAB:

This commonly encountered beetle, the six-spotted green tiger beetle, *Cicindela sexguttata*, is often mistaken for EAB due to its similar appearence. It is a predator of small insects and is frequently found on hiking trails. There are other insects often mistaken for EAB.

Symptoms and Signs:

New infestations are difficult to detect, as damage to the tree may not be apparent for up to three years. Symptoms of an infestation can include branch dieback in the upper crown, excessive epicormic branching on the tree trunk, and vertical bark splits. Woodpecker damage is sometimes apparent.

Dieback

Epicormic Branching

Bark Splits

Woodpecker Damage

Other Stressors:

Ash may also be stressed by drought, diseases such as ash yellows, and by native wood-boring insects like the redheaded ash borer, *Neoclytus acuminatus* (Fabricius) which creates a round emergence hole.

Redheaded Ash Borer